Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Quebecor World San Jose Inc.
Facility Name:	Quebecor World Richmond Inc.
Facility Location:	7400 Impala Drive Richmond, Virginia 23228
Registration Number:	50880
Permit Number:	PRO-50880

This permit includes the following programs:
Federally Enforceable Requirements - Clean Air Act (Sections I through IX)

December 1, 2003
Effective Date:

December 1, 2008
Expiration Date:

Director, Department of Environmental Quality

Signature Date

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I. Facility Information

Permittee
Quebecor World San Jose Inc.
dba: Quebecor World Richmond Inc.
P.O. Box 9579
Richmond, Virginia 23228

Responsible Official
Mr. Steve Eggleston
Vice President & General Manager

Facility
Quebecor World Richmond Inc.
7400 Impala Drive
Richmond, Virginia 23228

Contact Person
Mr. Jason Collins
Environmental/Safety Coordinator
804-264-3834

County Plant Identification Number: 087-0130

Facility Description: SIC Code 2754 – Quebecor operates a rotogravure publication printing facility in Henrico County, Virginia. Newspaper inserts, advertising circulars and supplements, retail and wholesale catalogs, tabloid magazines, and other commercial work are produced using the rotogravure and flexographic process. The rotogravure press rollers are machined, electroplated, cleaned, engraved, and polished in the cylinder-manufacturing portion of the facility. The printed products are produced “press-finished”, which includes the collating, folding, gluing-in of inserts, and trimming, and this is all performed in-line with the presses. The facility also operates an automated parts washing system (Renzmann cylinder cleaning tank) and a chrome plating operation for re-plating of engraved cylinders. The six production presses are subject to 40 CFR 60 Subpart QQ. The six presses, all storage tanks, ink mixing tanks, the parts cleaning processes, and the Renzmann cylinder wash tank are subject to the requirements of 40 CFR 63, Subparts A and KK

The chrome plating baths are subject to 40 CFR 63 Subpart N. Three natural gas /distillate oil fired boilers provide heat and steam to the facility. One boiler is subject to 40 CFR 60 Subpart Dc, and is rated at 33.48 MMBtu/hr. The other two boilers are not subject to 40 CFR 60 Subpart Dc and are rated at 29.4 MMBtu/hr and 33.48 MMBtu/hr.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
B001	S011	Cleaver Brooks Boiler, 1979 firing natural gas and distillate oil	29.4 MMBtu/hr				TBD
B002	S012	Cleaver Brooks Boiler, 1985 firing natural gas and distillate oil	33.48 MMBtu/hr				TBD
B003	S013	Johnson Boiler, 1995 firing natural gas and distillate oil	33.48 MMBtu/hr				TBD
Rotogravure Presses P001- P006							
P001	S001 S002	Rotogravure Press 740 75 inch width, 1700 fpm 8 stations Goss press, 1981	861.4 lbs VOC/hr as applied	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD
P002	S001 S002	Rotogravure Press 741 75 inch width, 1700 fpm 8 stations Goss press, 1980	915.9 lbs VOC/hr as applied	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD
P003	S001 S002	Rotogravure Press 742 96 inch width, 2000 fpm 10 stations Motter press, 1980	1039.6 lbs VOC/hr as applied	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD
P004	S001 S002	Rotogravure Press 743 75 inch width, 1700 fpm 8 stations Goss press, 1985	915.9 lbs VOC/hr as applied	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
P005	S001 S002	Rotogravure Press 744 94 inch width, 3000 fpm 8 stations Albert Frankenthal press, 1988	1406.0 lbs VOC/hr as applied	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD
P006	S003	Rotogravure Press 745 125 inch width, 3000 fpm 8 station Albert Frankenthal press, 1995	1952.0 lbs VOC/hr as applied	Dedert Carbon Adsorption System & Total Enclosure - Overall Control Efficiency of 97.7%	C003	VOC HAP	TBD
Cylinder Cleaning Tank							
P008	S001 S002	Cylinder Wash Tank Renzmann, 1986	6 cylinders/hr	Sutcliffe & Croftshaw Carbon Adsorption Systems - Overall Recovery Efficiency of 91%	C001 C002	VOC HAP	TBD
Cylinder Manufacturing Process							
P015	S008	Chromium (hard) Electroplating Tank 12,000 amps Walter, 1995	(3) 118-inch cylinders/hr	MAPCO Demister Filter (composite mesh pad) with a Control Efficiency of 99%	C004	Chromium	
P016	S008	Chromium (hard) Electroplating Tank 12,000 amps Max Daetwyler, 2006	(3) 138-inch cylinders/hr	MAPCO Demister Filter (composite mesh pad) with a Control Efficiency of 99%	C004	Chromium	
Waste Paper Handling System							
P017	S009	Paper Waste handling System 1 Hogger, Baler, Cyclone	8,000acfm	Steelcraft Fabric Filter rated at 8,000 acfm with a Control Efficiency of 90%	C005	PM PM_{10}	TBD
P018	S010	Paper Waste handling System 2 Hogger, Baler, Cyclone	12,000 acfm	Steelcraft Fabric Filter rated at 12,000 acfm with a Control Efficiency of 90%	C006	PM PM_{10}	TBD
P019	S011	Paper Waste handling System 3 Hogger, Baler, Cyclone	18,000 acfm	Steelcraft Fabric Filter rated at 18,000 acfm with a Control Efficiency of 90%	C007	PM PM_{10}	TBD

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Adhesive Process							
P020	Fugitive	Manual Paster Glue Process	NA				TBD
VOC Storage Tanks							
T001	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T002	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T003	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T004	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T005	Fugitive	VOC Storage Tank Extender, 1979	5000 gallon				
T006	Fugitive	VOC Storage Tank Extender, 1979	5000 gallon				
T007	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T008	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T009	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T0010	Fugitive	VOC Storage Tank Ink, 1979	5000 gallon				
T0011	Fugitive	VOC Storage Tank Ink, 1988	5000 gallon				
T0012	Fugitive	VOC Storage Tank Ink, 1991	5000 gallon				
T0013	Fugitive	VOC Storage Tank Ink, 1991	5000 gallon				
T0014	Fugitive	VOC Storage Tank Ink, 1995	5000 gallon				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
T0015	Fugitive	VOC Storage Tank Naptha, 1988	5000 gallon				
T0016	Fugitive	VOC Storage Tank Extender, 1995	5000 gallon				
T017	Fugitive	VOC Storage Tank Reclaimed VOC Adamson, 1986	6000 gallon				
T018	Fugitive	VOC Storage Tank Reclaimed VOC Adamson, 1986	6000 gallon				
T019	Fugitive	VOC Storage Tank Reclaimed VOC Adamson, 1986	6000 gallon				
T020	Fugitive	VOC Storage Tank Reclaimed VOC, 1988	6000 gallon				
T021	Fugitive	VOC Storage Tank Reclaimed VOC Highland, 1995	6000 gallon				

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.
* Emissions from Units P001, P002, P003, P004, P005, and P008 may be controlled by one of two Sutcliffe & Croftshaw Carbon Adsorption Systems (C001or C002) and emitted from the connecting stack (S001 or S002)

III. Fuel Burning Equipment Requirements – (B001, B002, B003)

III.A. Limitations

III.A.1. Fuel Specifications: The approved fuels for the boilers (B001, B002, and B003) are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-97 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 12 of TBD Permit)

III.A.2. Fuel Sulfur Limit: Fuel - The distillate oil and natural gas shall meet the specifications below:

DISTILLATE OIL which meets the ASTM [D396] specification for numbers 1 or 2 fuel oil:
Maximum sulfur content per shipment: 0.5%

NATURAL GAS:
Minimum heat content: 1000 Btu/cf HHV.

(40 CFR 60.42c(d), 9 VAC 5-80-110, and Condition 14 of TBD permit.)

III.A.3. Fuel Consumption Limits: The boilers (B001, B002, and B003) shall consume no more than a total of 409.3 million cubic feet of natural gas and a total of 680,000 gallons of distillate oil per year, calculated monthly as the sum of the gas or oil consumption over the previous consecutive 12 months.
(9 VAC 5-80-110 and Condition 13 of TBD Permit)

III.A.4. Emission Limits: Emissions from the operation of the three boilers (B001, B002, and B003) shall not exceed the limits specified below:

	Boiler Specific Hourly Emissions			**Combined Hourly and Annual Emissions from B-1, B-2, and B-3**	
	B-1	**B-2**	**B-3**	**Hourly**	**Annual**
TSP	0.9 lbs/hr	0.5 lbs/hr	0.5 lbs/hr	1.8 lbs/hr	2.2 tpy
PM_{10}	0.4 lbs/hr	0.3 lbs/hr	0.3 lbs/hr	0.9 lbs/hr	1.9 tpy
SO_2	30.3 lbs/hr	17.2 lbs/hr	17.2 lbs/hr	64.7 lbs/hr	24.3 tpy
NO_x	8.5 lbs/hr	4.9 lbs/hr	4.9 lbs/hr	18.2 lbs/hr	27.3 tpy
CO	2.5 lbs/hr	2.8 lbs/hr	2.8 lbs/hr	8.1 lbs/hr	18.9 tpy
VOC	0.2 lbs/hr	0.2 lbs/hr	0.2 lbs/hr	0.5 lbs/hr	1.2 tpy

*Annual emissions shall be determined by the monthly consumption of natural gas and distillate oil calculated as the sum of each consecutive 12 month period.
(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 20 of TBD Permit)

III.A.5. Visible Emission Limit: Visible Emissions from each of the boiler stacks (S011, S012, S013) shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity.
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 25 of TBD Permit)

III.A.6. NSPS Subpart Dc Requirements by Reference - Except where this permit is more restrictive than the applicable requirement, the NSPS Subpart Dc equipment as described in Section II of this permit shall be operated in compliance with the requirements of 40 CFR 60, Subpart Dc.

(9 VAC 5-80-110 and Condition 27 of TBD Permit)

III.B. Monitoring

III.B.1. Periodic Monitoring of Visible Emissions from Boiler Stacks (S011, S012, S013): For each boiler (B001, B002, and B003) which burns fuel oil for a total of 6 hours or more during any calendar week, the associated boiler stack shall be observed visually for a six minute period at least once during that calendar week while the boiler is burning fuel oil in order to determine if there are any visible emissions from that boiler other than a short, white condensed-water plume. If visible emissions are present at any time during the observation period, a visible emission evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed by a certified observer within 48 hours unless corrective adjustment, maintenance or repair has corrected the condition within 12 hours of the observation. The weekly observation shall not be conducted during periods of startup, shutdown, malfunction or maintenance. Observed visible emissions shall not be considered a reportable exceedance unless the subsequent VEE confirms a violation of the visible emission standard. Records of the observation and any corrective adjustment, maintenance or repair performed to correct the abnormal emission condition shall be kept in accordance with Condition III.C.2. A visual observation of an emission unit is not required during any calendar week in which a VEE has been performed on that emission unit.

(9 VAC 5-80-110 E.3.)

III.C. Recordkeeping

III.C.1. Fuel Certifications: The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

a. The name of the fuel supplier,

b. The date on which the oil was received,

c. The volume of distillate oil delivered in the shipment,

d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and

e. The sulfur content of the oil.

(40 CFR 60.48c(i) and f(1), 9 VAC 5-80-110 and Condition 15 of TBD Permit)

III.C.2. Compliance Records: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. The monthly and annual throughput of natural gas (in million cubic feet) and the daily, monthly, and annual throughput of distillate oil (in 1000 gallons) for the three boilers (B001, B002, and B003). The annual throughput shall be calculated as the sum of each consecutive 12 months.

b. Monthly emission calculations for the boilers B001 and B002 combined well as emission factors, rated capacities, fuel characteristics, and formulas used to calculate the emissions from boilers B001 and B002 combined, and the maximum hourly throughput of fuel the boilers.

c. Monthly emission calculations for boiler B003 as well as emission factors, rated capacity, fuel characteristics, and formulas used to calculate the emissions from boiler B003, and the maximum hourly throughput of fuel to the boiler.

d. All fuel supplier certifications.

e. All visible emission observations and evaluations

f. Boiler maintenance schedules and records of completed maintenance, including corrective adjustments, maintenance and repair to the boilers as a result of weekly visible emission observations or evaluations.

g. Boiler operator training records.

h. Records of occurrence of any startup, shutdown, or malfunction in the operation of the Johnson boiler (B003), any malfunction of control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative.

i. Records of all measurements associated with the Johnson boiler (B003), including continuous monitoring system, monitoring device, and performance testing measurements, all monitoring calibration checks, and all adjustments maintenance on these systems and devices, and future performance tests or future continuous monitoring systems installed to demonstrate compliance in lieu of visible emission evaluations or fuel certifications.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(40 CFR 60.7(f) and 60.48c(e)(11), 9 VAC 5-50-50, 9 VAC 5-80-110, and Condition 39 of TBD Permit)

III.C.3. Operating and Training Procedures: The permittee shall maintain records of the required training including a statement of time, place and nature training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the

manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-110 and Condition 16 of TBD Permit)

III.D. Testing

III.D.1. Test Methods: If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

III.D.2. Conduct of Performance Tests: Performance tests that are conducted in accordance with the methods specified in Condition III.D.1 in addition to the monitoring specified in Section III.B of this permit shall be conducted in accordance with Section III.B of this permit, except as follows:

a. Sulfur dioxide testing shall be conducted over 30 consecutive operating days, with a separate performance test completed at the end of each steam operating day and a 30 day average SO_2 emission rate calculated to show compliance with the lb/mmBtu standard. The steam generating load during the 30 day performance test shall be representative of future operating conditions.

b. In addition, if the permittee desires to demonstrate compliance with the lb/mmBtu sulfur dioxide standard by performance test instead of by fuel sulfur content, the permittee shall demonstrate the maximum design heat input capacity of the steam generating unit by operating at this capacity for 24 hours. If the demonstrated 24-hour averaged firing rate is less than the maximum design heat input capacity stated by the manufacturer, the demonstrated value shall be used to determine the annual capacity factor; otherwise the capacity stated by the manufacturer shall be used.

c. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the permittee's control, compliance may, upon approval from the Director, Piedmont Region, be determined using the arithmetic mean of the two other runs.

(9 VAC 5-50-30 G, 40 CFR 60.8(f), and 9 VAC 5-80-110)

III.E. Reporting

III.E.1. ~~1.~~ **Fuel Quality Reports:** The permittee shall submit fuel quality reports to the Director, Piedmont Region within 30 days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter, the reports shall include:

a. The dates included in the calendar quarter;

b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition III.C.1 for each shipment of distillate oil; and,

c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-50-50, 9 VAC 5-50-410, 9 VAC 5-80-110, and Condition 40 of TBD Permit)

III.E.2. Required Notifications: The permittee shall provide written notification to the Director, Piedmont Region within 15 calendar days after any physical or operational change to any existing boiler which may increase the emission rate of any air pollutant to which a standard applies under 40 CFR 60, Subpart Dc (sulfur dioxide and particulate) unless that changes is specifically exempted from the definition of "modification" under 9 VAC 5-50-410 §60.14.

(40 CFR 60.7(a)(i)(4) and 60.8 (d) and 9 VAC 5-80-110)

III.E.3. Performance Testing Notification: The permittee shall furnish written notification to the Director, Piedmont Region of the anticipated dates of performance tests of the printing facility and testing protocols postmarked at least 30 days prior to such tests.

(40 CFR 60.8(d) and 9 VAC 5-80-110)

IV. Publication Printing Process Equipment Requirements – (P001 through P006, P008 and T001 through T021)

IV.A. Limitations

IV.A.1. Emission Control: Volatile organic compound (VOC) emissions from Presses 740, 741, 742, 743, 744, and the Renzmann Cylinder Wash (P001, P002, P003, P004, P005, and P008) shall be controlled by carbon adsorption solvent recovery system (Solvent Recovery A: C001and C002) each with an overall recovery efficiency of 91 percent. Compliance with this condition shall be demonstrated through a VOC mass balance equation. The solvent recovery system shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 2 of TBD Permit)

IV.A.2. Emission Control: Volatile organic compound (VOC) emissions from Press 745 (P006) shall be controlled by a 100 percent efficient permanent total enclosure capture system and a dedicated carbon adsorption solvent recovery system (Solvent Recovery B: C003) having an overall control efficiency of 97.7 percent. The printing press, permanent total enclosure, and carbon adsorption system shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 3 of TBD Permit)

IV.A.3. Emission Controls and Work Practices: No person or owner shall cause or permit to be discharged from any affected facility any volatile organic compound (VOC) in excess of that resultant from using reasonably available control technology.

a. All cylinder cleaning solvents and VOC-containing solvents shall be kept in closed containers (e.g. capped squirt bottles, covered storage cans, or stoppered bottles), except during use,

b. All waste inks and solvents containing VOC shall be stored in closed containers and shall be disposed of by transporting offsite for reclamation or incineration,

c. Used rags and other cleaning materials that contain residual VOC shall be contained in covered bins until shipped offsite,

(9 VAC 5-50-20 F, 9 VAC 5-50-260 and 9 VAC 5-80-110)

IV.A.4. Emission Control Requirement: The permanent total enclosure for Press 745 (P006) shall meet the following criteria:

a. Any natural draft openings shall be at least 4 equivalent opening diameters from each VOC emitting point;

b. The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;

c. The average facial velocity of air through the natural draft openings shall be at least 200 feet per minute and the direction of air flow shall be into the enclosure

(or, if differential pressure is measured, the pressure drop shall be at least .007 in. H_2O);

d. All access doors and windows shall be closed during routine operation of the press (except those which are included in determining the area of natural draft openings in b above).

e. All of the exhaust gases from the enclosure shall be directed to the carbon bed adsorption system (C003).

(9 VAC 5-80-30, 9 VAC 5-50-270, 9 VAC 5-80-110 and Condition 5 of TBD permit)

IV.A.5. Emission Standard: Volatile organic compound (VOC) emissions from the operation of each rotogravure press (P001, P002, P003, P004, P005, and P006,) shall not exceed 16 percent of the total mass of VOC solvent and water used at that press during any one performance averaging period. For continuing compliance purposes, the performance-averaging period is one calendar month.

(40 CFR 60.432, 9 VAC 5-80-110, and Condition 4 of TBD permit)

IV.A.6. Emission Limitation: Hazardous Air Pollutant (HAP) emissions from the operation of the publication rotogravure presses P001, P002, P003, P004, P005, P006and all equipment ancillary to the proper operation of the publication rotogravure presses, including but not limited to, the cylinder wash tank P008, VOC storage tanks T001 through T021, ink mixing and all press and floor cleaning activities shall not exceed eight percent of the total volatile matter used each month. The emission limitation shall be achieved by overall recovery efficiency of 92 percent of organic HAP used, by a combination of capture and control technologies and substitution of materials.

(40 CFR 63.824 and 9 VAC 5-80-110)

IV.A.7. Throughput Limit: The Renzmann cylinder cleaning tank (P008) shall clean no more than 10,000 cylinders per year, calculated monthly as the sum of the cylinders cleaned over the previous 12 months.
(9 VAC 5-80-110 and Condition 7 of TBD Permit)

IV.A.8. Throughput Limit: The annual throughput of VOC to Presses No. 740, 741, 742, and 743 (P001, P002, P003, and P004) shall not exceed 10,585.5 tons per year, calculated monthly as the sum of the VOC throughput over the previous consecutive 12 months.
(9 VAC 5-80-110 and Condition 8 of TBD Permit)

IV.A.9. Throughput Limit: The annual throughput of VOC to Press No. 744 (P005) shall not exceed 4115.1 tons per year, calculated monthly as the sum of the VOC throughput over the previous consecutive 12 months.
(9 VAC 5-80-110 and Condition 9 of TBD Permit)

IV.A.10. Throughput Limit: The daily throughput of VOC to Press No. 745 (P006) shall not exceed 46,848 pounds per day. The annual throughput of VOC to press P006 shall not exceed 4500 tons per year, calculated monthly as the sum of the

VOC throughput over the previous consecutive 12 months.
(9 VAC 5-80-110 and Condition 10 of TBD Permit)

IV.A.11. Throughput Limit: The annual throughput of VOC from the paster glue (P020) process to Presses Nos. 740, 741, 742, 743, 744, and 745, (P001, P002, P003, P004, P005, and P006) shall not exceed 1.5 tons per year, calculated monthly as the sum over the previous consecutive 12 months.
(9 VAC 5-80-110 and Condition 11 of TBD Permit)

IV.A.12. Visible Emission Limit: Visible emissions from the carbon bed adsorption system~~s~~ C001 and C002 shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

IV.A.13. Visible Emission Limit: Visible emissions from the carbon bed adsorption system (C003) dedicated to the Frankenthal press No. 745 (P006) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 24 of TBD Permit)

IV.A.14. Emission Limit: Volatile Organic Compound (VOC) emissions from the operation of the Renzmann cylinder wash (P008) shall not exceed the limits specified below:

Lbs/hr	tons/yr
13.4	11.2

(9 VAC 5-80-110 and Condition 21 of TBD Permit)

IV.A.15. Emission Limits: Volatile Organic Compound (VOC) emissions from the operation of the rotogravure presses as determined by mass balance calculation, actual press running hours, and VOC CEMS shall not exceed the limits specified below:

Press Number		lbs/hr	lbs/day	tons/yr
Press 740	(P001)	77.5		226.8
Press 741	(P002)	82.4		211.5
Press 742	(P003)	93.6		273.7
Press 743	(P004)	82.4		240.8
Press 744	(P005)	126.5		370.4
Press 745	(P006)	54.7	1311.7	126.0
Paster Glue	(P0020)	0.4		1.5
Total Press VOC Emissions		517.5	1311.7	1450.5

(9 VAC 5-80-110 and Condition 17 of TBD Permit)

IV.A.16. Emission Limits: Emissions of the following pollutants, as limited in Condition IV.A.15 for each press as VOC, shall not exceed the percentages (by weight) of each component of the solvent blend as listed below:

Hexane 1.00 ~~percent~~ %

Benzene	0.01 ~~percent~~ %
Toluene	96.00 ~~percent~~ %
Ethylbenzene	2.00 ~~percent~~ %
Xylenes	5.16 ~~percent~~ %

(9 VAC 5-80-110 and Condition 18 of TBD Permit)

IV.A.17. Permitted Pollutants: Condition IV.A.16 of this permit provides a list of HAPs to be emitted by the publication printing process equipment (P001 through P006, P008 and T001 through T021). A change in the amounts of these pollutants emitted and/or a change in your facility which results in the emissions of additional pollutants may require a permit to modify and operate.

(9 VAC 5-50-180, 9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 51 of TBD Permit)

IV.A.18. Minimum Stack Heights: The exhaust stack heights for all carbon bed adsorber systems (S001, S002, S003) located at the printing facility shall be a minimum of 50 feet, as measured from ground level. There shall be no caps or downturns installed at the exit of any carbon bed adsorber exhaust stack.

(9 VAC 5-80-110 and Condition 52 of TBD Permit)

IV.A.19. Startup, Shutdown, and Malfunction Plan: The permittee shall develop and implement a written startup, shutdown, and malfunction plan for the Solvent Recovery systems A and B (including any other associated air pollution control equipment) for operating and maintaining the affected facility during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. The plan shall identify all routine or otherwise predicable Continuous Monitoring System (CMS) malfunctions. This plan is incorporated into this permit by reference (see Condition IV.A.24).

(40 CFR 63.6(e)(3) and 9 VAC 5-80-110)

IV.A.20. Operation and Maintenance Requirements: During periods of startup, shutdown, and malfunction, the permittee shall operate and maintain Solvent Recovery systems A and B (including any other associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan required by Condition IV.A.19 and as follows:

a. When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall:

   (i) Keep records for that event that demonstrate that the procedures specified in the plan were followed, including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control equipment and others required by Conditions IV.C.3.c and d.

   (ii) Confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more

frequent) startup, shutdown, and malfunction report required in Condition IV.E.2.

b. If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall:

(i) Keep records of the actions taken for that event and other records required by Condition IV.C.3.c;

(ii) Report such actions taken for the event to the Director, Piedmont Region within 2 working days after commencing actions inconsistent with the plan in accordance with Condition IV.E.3.a ;

(iii) Follow up the initial report with a letter to the Director, Piedmont Region within 7 working days after the end of the event, in accordance with Condition IV.E.3.b ; and

(iv) Revise the plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment, if the plan fails to address (or inadequately addresses) an event that meets the characteristics of a malfunction, but was not in the plan.

(v) Make reasonable revisions to the startup, shutdown, and malfunction plan required by the Director, Piedmont Region, if the Director finds that the plan:

(a) Does not address a startup, shutdown, or malfunction event that has occurred;

(b) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards; or

(c) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

(40 CFR 63.6(e) and 9 VAC 5-80-110)

IV.A.21. Correction of Malfunctions: Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

(40 CFR 63.6(e) and 9 VAC 5-80-110)

IV.A.22. Violation of Hazardous Air Pollutant Emission Standards: Any of the publication rotogravure presses (P001, P002, P003, P004, P005 and P006) and any equipment ancillary to the proper operation of the publication rotogravure presses, including but not limited to the cylinder cleaning tank P008, VOC storage tanks T001 through T021, ink mixing and all press and floor cleaning activities shall be shut

down immediately if it is unable to meet the applicable emission standards, and it shall not return to operation until it is in compliance with the applicable emission standards.

(9 VAC 5-20-180 and 9 VAC 5-80-110)

IV.A.23. NSPS Subpart QQ Requirements by Reference: Except where this permit is more restrictive than the applicable requirement, the NSPS Subpart QQ equipment as described in Section II shall be operated in compliance with the requirements of 40 CFR 60, Subpart QQ.

(9 VAC 5-50-400, 9 VAC 5-50-410, and Condition 28 of TBD Permit)

IV.A.24. MACT Subpart KK Requirements by Reference: Except where this permit is more restrictive than the applicable requirement, the MACT Subpart KK equipment as described in Section II shall be operated in compliance with the requirements of 40 CFR 63, Subpart KK.

(9 VAC 5-60-120 and Condition 29 of TBD Permit)

IV.B. Monitoring

IV.B.1. Continuous Emission Monitoring Systems (CEMS) - A continuous emission monitor (CEM) shall be installed to measure and record the concentration of VOC emitted from the solvent recovery systems (C001 and C002). The CEMs shall be maintained and calibrated in accordance with vendor recommendations.

(9 VAC 5-50-40 F, 9 VAC 5-80-110, and Condition 33 of TBD Permit)

IV.B.2. Continuous Emission Monitoring System (CEMS) - The carbon bed adsorption system for press No. 745 (P006) shall be equipped with continuous emission monitors (CEMs) that measure and record the concentration of volatile organic compounds and shall be equipped with a device which calculates and records a 24-hour average VOC removal efficiency and which demonstrates compliance daily with the VOC removal efficiency requirement of Condition IV.A.2. The continuous emissions monitors shall be located at the carbon bed adsorption system inlet plenum and exhaust stack and shall be maintained, located, and calibrated in accordance with approved procedures. A 30 day notification, prior to the demonstration of a continuous monitoring system's performance, and subsequent notifications shall be submitted to the Director, Piedmont Region.

(9 VAC 5-50-40 F, 9 VAC 5-80-110, and Condition 32 of TBD Permit)

IV.B.3. Continuous Monitoring Device (CMD)- The permanent total enclosure for press No. 745 (P006) shall be equipped with a device which continuously measures differential pressure drop across the enclosure boundary or which continuously measures the face velocity of air flow into the enclosure to determine compliance with Condition IV.A.4.c. The device shall be maintained, located, and calibrated in accordance with approved procedures.

(9 VAC 5-50-30, 9 VAC 5-80-30 F, 9 VAC 5-80-110, and Condition 34 of TBD Permit)

IV.B.4. Continuous Monitoring Device (CMD) - A device shall be installed to indicate the cumulative amount of volatile matter recovered by each solvent recovery system (C001, C002 and C003). The devices shall be installed, maintained and operated in

accordance with manufacturer specifications. The devices shall be initially certified by the manufacturer to be accurate to within ±2.0 percent.

(40 CFR 63.824(b)(i)(D))

IV.B.5. Periodic Monitoring of the Press Total Enclosure for P006: The permittee shall check (and document) compliance of the Press No. 745 (P006) permanent total enclosure with the requirements of Condition IV.A.4. prior to each startup of Press No. 745 (P006), and shall be checked not less than once per calendar day while the press is operating, if the press is operated at any time within that 24 hour period. The information needed to document conformance with the five requirements of Condition IV.A.4 may be recorded using a checklist in order to reduce the recordkeeping burden for conforming events. Actions taken prior to startup to correct nonconforming conditions do not need to be noted. Multiple startups over the period of one hour may be considered as one startup.

(9 VAC 5-80-110 E.3.)

IV.B.6. Periodic Monitoring of VOC Removal Efficiency for C003: The permittee shall monitor the 24-hour average VOC removal efficiency of the carbon bed adsorption control device C003 on a daily basis for compliance with the overall VOC removal efficiency requirement of Condition IV.A.2.
(9 VAC 5-80-110 and Condition 32 of TBD Permit)

IV.B.7. Periodic Monitoring of VOC Overall Recovery Efficiency for P001-P005, and P008: The permittee shall monitor the overall recovery efficiency (ORE) for each of the carbon bed solvent recovery systems C001 and C002 by liquid-liquid mass balance on a monthly basis for compliance with the overall recovery efficiency (ORE) requirements of Conditions IV.A.1.

(9 VAC 5-80-110 E.3)

IV.B.8. Periodic Monitoring of VOC Emission Percentage: The permittee shall calculate the estimated emission percentage (P) for each affected facility (P001 through P006) for each performance averaging period and shall demonstrate compliance with the VOC emission standard in ConditionIV.A.5 as follows:

a. For monitoring purposes, the performance averaging period shall be one calendar month.

b. If affected facilities share the same raw ink storage/handling system with existing facilities, the total solvent used, solvent recovered and emission percentages for the combined facilities may be documented. The combined emission percentage is compared to the overall average for the existing and affected facilities determined during the most recent performance test.

c. The permittee may choose to show compliance of the combined performance of existing and affected facilities controlled in common by the same solvent recovery system.

d. If all existing and affected facilities within the same plant use solvent recovery systems, the permittee may choose to show compliance on a plant-wide basis for all the existing and affected facilities together. No separate tests on existing

facilities and no segregated liquid measurement facilities are required for this option.

e. Temperatures and liquid densities determined during the most recent performance test shall be used to calculate corrected volumes and mass quantities, except the permittee may choose to measure temperatures for determining of actual liquid densities during each performance averaging period. A different base temperature may be used for each performance averaging period if desired by the permittee.

f. The emission percentage shall be calculated using the procedures of Conditions IV.D.1 and IV.D.7

(40 CFR 60.433(e), (f), and (g), and 60.434(a), and 9 VAC 5-80-110)

IV.B.9. Periodic Monitoring of Overall Effective Organic HAP Recovery Efficiency: The permittee shall demonstrate compliance on a monthly basis by showing that the HAP emission limitation in Condition IV.A.6 is achieved by performing a liquid-liquid material balance for each month as follows:

a. Measure the mass of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agent, and other material used by the publication rotogravure printing source, including but not limited to, ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage.

b. Determine the organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agents, and other material used by the publication rotogravure printing source, including but not limited to ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage, using the procedure in Condition IV.D.5.

c. Determine the volatile matter content, including water, of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agents, and other material used by the publication rotogravure printing source, including but not limited to ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage, using the procedure in Condition IV.D.3.

d. Measure the amount of volatile matter recovered for the month (Mvr).

e. Calculate the overall effective organic HAP recovery efficiency (Re) for the month using the equation contained in Condition IV.D.2.

f. The affected source is in compliance with the HAP emission limitation in Condition IV.A.6 for the month, if Re is at least 92 percent each month.

(40 CFR 63.824(b)(1)(i) and 9 VAC 5-80-110)

IV.C. Recordkeeping

IV.C.1. General Graphic Arts Compliance Records: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with the requirements of Section IV.A of this permit and shall be

consistent with DEQ policy, AQP 4 - Procedures for Maintaining Records for Surface Coating Operations and Graphic Arts Printing Processes. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. For each press, at all times:

   (i) Identification number of the press.

   (ii) Hours of operation per day and per year.

   (iii) The method of application.

   (iv) The number and types of coatings applied to the substrate.

   (v) The drying method.

   (vi) The substrate type.

   (vii) The associated add-on capture system location and type, the actual capture efficiency (percent), and the method used to determine the capture efficiency.

b. For each coating at all times:

   (i) The supplier name, coating name and identification number.

   (ii) The coating density (pounds per gallon).

   (iii) The volatile content of the coating as supplied (percent by weight).

   (iv) The water content of the coating as supplied (percent by weight).

   (v) The exempt solvent content of the coating as supplied (percent by weight).

   (vi) The solids content of the coating as supplied (percent by volume).

   (vii) The name of the diluents, if any.

   (viii) The identification number of diluents.

   (ix) The diluent VOC density (pounds per gallon).

   (x) The VOC content of the diluent (percent by weight).

   (xi) The exempt solvent content of the diluent (percent by weight).

   (xii) The diluent /coating ratio (gallon diluent per gallon coating).

c. For each add-on control system:

   (i) The control system identification number, manufacturer, model, type and installation date.

   (ii) The actual removal efficiency, the method used to determine the removal efficiency, and the last test date for which the removal efficiency was determined.

(iii) Emission test results, including inlet and outlet VOC concentrations (ppmv), the method used to determine the concentrations and the last test date for which the concentrations were determined.

(iv) The design pressure drop across the adsorber at breakthrough, and the specific VOC species analyzed and its concentration at breakthrough.

d. Daily, for each press operated:

(i) Identification number of the press.

(ii) The time period for each application run.

(iii) The coating identification numbers of each coating applied to the substrate.

(iv) The amount of each coating used.

(v) The diluent and clean up solvent identification numbers.

(vi) The amount of each diluent used.

(vii) The amount of each clean up solvent used.

(viii) Identification number of the associated add-on control device, and whether or not the control device was in operation during the entire time the press was in operation.

(ix) The calculated VOC emissions.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-20-121 AQP-4, 9 VAC 5-80-110 and Condition 39 of TBD Permit)

IV.C.2. Compliance Records for the Publication Rotogravure Printing NSPS QQ: In addition to the records required above, the permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with the requirements of Section IV.A of this permit and 40 CFR 60, Subpart QQ and shall be consistent with DEQ policy. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall also include, but are not limited to:

a. Records of the following parameters and the liquid temperatures at which they were measured, for each performance averaging period:

(i) The amount of raw inks and related coatings used.

(ii) The VOC content of each raw ink and related coating used determined according to Condition IV.D.7.

(iii) The amount of VOC solvent added to the inks and coatings used.

(iv) The amount of VOC solvent used as cleaning agents.

(v) The amount of VOC solvent recovered.

b. Records of the temperatures and liquid densities and the calculated emission percentages (P) determined for compliance with Condition IV.A.5 during the most recent performance test.

c. If actual liquid densities are determined for the performance averaging period, records of the density variations with temperature of the raw inks, related coatings, VOC solvents used, and VOC solvent recovered using the methods stipulated in Condition IV.D.7 for the performance averaging period.

d. For each performance averaging period, the calculated emission percentage (P) calculated in accordance with Condition IV.D.1 as required in Condition IV.B.8.

e. If the comparison of Condition IV.B.8.b is to be used to avoid separate accounting of raw inks, records shall be kept of the overall emission percentage as well as all emission percentages for each affected (P001 through P006) facility determined during the most recent performance test.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(40. CFR 60.433 and 60.434, 9 VAC 5-50-50, and 9 VAC 5-80-110)

IV.C.3. Compliance Records for the Printing and Publishing MACT KK: In addition to the records required above, the permittee shall maintain files of all information required by this condition recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. Monthly liquid-liquid material balances of HAP used at the facility, to include:

(i) The mass of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agents, and other material used by the publication rotogravure printing source, including but not limited to ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage.

(ii) The organic HAP content of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agents, and other material used by the publication rotogravure printing source, including but not limited to ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage.

(iii) The volatile matter content, including water, of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, cleaning agents, and other material used by the publication rotogravure printing source, including but not limited to ancillary equipment and processes such as parts cleaning, cylinder preparation, tank loading, and ink mixing and storage.

(iv) The total amount of volatile matter recovered by the solvent recovery system (C001, C002, and C003).

b. For each month, the overall effective organic HAP recovery efficiency (Re) calculated by liquid-liquid material balance in accordance with Condition IV.D.2.

c. The occurrence and duration of each startup, shutdown and malfunction of operations (i.e. process equipment)(also an NSPS requirement)(See listed items in Section II.)

d. The occurrence and duration of each malfunction of air pollution control equipment (also an NSPS requirement)(See listed items in Section II)

e. All maintenance performed on the air pollution control equipment (See listed items in Section II.)

f. Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan.

g. All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events.)

h. All results of performance tests and all measurements as may be necessary to determine the conditions of performance tests.

i. All documentation supporting initial notifications of applicability to the relevant standard (ref. 40 CFR 63.9(b)(1)) and notifications of compliance status (ref. 40 CFR 63.9(h)).

(40 CFR 60.7(b), 63.829(b)(1) and (c), 63.830(b)(1) and (3), 9 VAC 5-50-50, and 9 VAC 5-80-110)

IV.C.4. Additional Compliance Records for the Printing and Publishing MACT KK: The permittee shall also maintain the following records necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region:

a. The written startup, shutdown and malfunction plan, for the life of the publication printing processes or until the processes are no longer subject to the provisions of 40 CFR 63, Subpart KK., and

b. Previous (i.e., superseded) versions of the startup, shutdown and malfunction plan, if the startup, shutdown and malfunction plan is revised, for a period of 5 years after each revision to the plan.

(40 CFR 63.6(e)(v), 9 VAC 5-50-50, and 9 VAC 5-80-110)

IV.C.5. Additional Permit Compliance Records: In addition to the records required above, the permittee shall also maintain records of all emission data and operating parameters necessary to demonstrate compliance with the requirements of Section IV.A of this permit and shall be consistent with DEQ policy. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall also include, but are not limited to:

a. Monthly records of the number of cylinders cleaned in the Renzmann cylinder cleaning tank (P008), and the number of cylinders cleaned over the previous consecutive 12 months.

b. Monthly records of the throughput of VOCs to the presses, and the monthly total of the previous consecutive twelve months' throughput of VOC as follows:

(i) The total of Presses Nos. 740, 741, 742, 743 (P001 through P004);

(ii) Press No. 744 (P005); and

(iii) Press No. 745 (P006).

c. Monthly material balances of VOC used at the facility, to include:

(i) The throughput of VOCs to each press (P001- P005) controlled by carbon bed adsorption recovery system No. 1 and No. 2 (C001 and C002);

(ii) The throughput of VOCs to Press No. 745 (P006) controlled by carbon bed adsorption recovery system No. 3 (C003);

(iii) The throughput of waste VOCs from each of the presses (P001- P006) that is disposed of off-site;

(iv) Amount of VOC recovered by the carbon bed recovery system (C001 - C003);

(v) Inventory loss of VOC from the Renzmann cylinder cleaning tank (P008) controlled by carbon bed adsorption recovery system No. 1 and No. 2 (C001 and C002);

(vi) A monthly calculation of VOC emissions by press (P001- P006) and by the Renzmann cylinder cleaning tank (P008); and

(vii) A monthly total of the previous twelve months' VOC emissions by press and by the Renzmann cylinder cleaning tank;

d. Records for the total enclosure, the carbon bed adsorption systems and continuous emission monitoring systems, to include:

(i) The manufacturer's recommendations for carbon bed replacement;

(ii) Records of actual carbon bed replacement;

(iii) Records to demonstrate completion of all monitoring equipment calibrations, checks and tests;

(iv) Records of monitored carbon bed inlet gas VOC concentrations, as applicable, and exhaust gas VOC concentrations;

(v) A 24-hour average VOC removal efficiency (Press 745 – P006 only) calculated from the monitored carbon bed inlet and exhaust gas VOC concentrations from carbon bed adsorption recovery system No. 3 (C003); and

(vi) Records demonstrating compliance with the permanent total enclosure showing the differential pressure drop across the enclosure boundary or continuous measurement of face velocity of air flow into the enclosure

e. Operator training records.

f. Records of the occurrence and duration of any period during which a continuous monitoring system or monitoring system required under Section IV.B above (also an NSPS requirement) was not operational.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 40 CFR 60.7(b), 9 VAC 5-80-110 and Condition 39 of TBD Permit)

IV.D. Testing

IV.D.1. Determination of VOC Emission Percentage: The emission percentage (P) shall be calculated in accordance with one of the following two equations:

$$P = \frac{(Lt - Lr)}{Lt} \times 100 \quad \text{or} \quad P = \frac{(Mt - Mr)}{Mt} \times 100$$

Where, Lt = Total density-corrected* liquid volume of VOC used†.
= Lo + Ld + Lg (sum of density-corrected* liquid volumes of VOC used as inks and coatings (Lo), VOC diluents (Ld), and VOC cleaning agents (Lg).)

Lo = Total density-corrected* volume of VOC in raw inks and coatings used†.
= Σ VOC volume of mass-measured inks with VOC content by weight %
+ Σ VOC volume of volume-measured inks with VOC content by weight %
+ Σ VOC volume of volume-measured inks with VOC content by volume %

$$= \sum_{i=1}^{k} [(Mc_i \times Wc_i)/D_B] + \sum_{i=1}^{m} [(Lc_i \times Dc_i \times Wc_i)/D_B] + \sum_{i=1}^{n} [(Lc_i \times Do_i \times Vc_i)/D_B]$$

Ld = Total density-corrected* volume of VOC in diluents used†.
= Σ density-corrected* volume of VOC in mass-measured diluents
+ Σ density-corrected* volume of VOC in volume-measured diluents

k m

$= \sum_{i=1} [Md_i/D_B] + \sum_{i=1} [(Ld_i \times Dd_i)/D_B]$

Lg = Total density-corrected* volume of VOC in cleaning agents used†.
= Σ density-corrected* volume of mass-measured VOC in cleaning agents
+ Σ density-corrected* volume of volume-measured VOC in cleaning agents

$= \sum_{i=1}^{k} [Mg_i/D_B] + \sum_{i=1}^{m} [(Lg_i \times Dg_i)/D_B]$

Lr = Total density-corrected* liquid volume of VOC in solvent recovered†.
= Σ density-corrected* volume of mass-measured VOC in solvent recovered
+ Σ density-corrected* volume of volume-measured VOC in solvent recovered

$= \sum_{i=1}^{k} [Mr_i/D_B] + \sum_{i=1}^{m} [(Lr_i \times Dr_i)/D_B]$

Mt = Total mass of VOC used.
= Mo + Md + Mg (sum of mass of VOC used as inks and coatings (Mo), VOC diluents (Md), and VOC cleaning agents (Mg).)

Mo = Total mass of VOC in raw inks and coatings used†.
= Σ VOC mass in mass-measured inks
+ Σ VOC mass in volume-measured inks with VOC content by weight %
+ Σ VOC mass in volume-measured inks with VOC content by volume %

$= \sum_{i=1}^{k} (Mc_i \times Wc_i) + \sum_{i=1}^{m} (Lc_i \times Dc_i \times Wc_i) + \sum_{i=1}^{n} (Lc_i \times Do_i \times Vc_i)$

Md = Total mass of VOC in solvent diluents used†.
= Σ mass of VOC in mass-measured solvent diluents
+ Σ mass of VOC in volume-measured solvent diluents

$= \sum_{i=1}^{k} (Md_i) + \sum_{i=1}^{m} (Ld_i \times Dd_i)$

Mg = Total mass of VOC in cleaning agents used†.
Σ mass of VOC in mass-measured solvent cleaning agents
+ Σ mass of VOC in volume-measured solvent cleaning agents

$= \sum_{i=1}^{k} (Mg_i) + \sum_{i=1}^{m} (Lg_i \times Dg_i)$

Mr = Total Mass of VOC in solvent recovered†.
Σ mass of VOC in mass-measured recovered VOC solvent
+ Σ mass of VOC in volume-measured recovered VOC solvent

$= \sum_{i=1}^{k} [Mr_i/D_B] + \sum_{i=1}^{m} [(Lr_i \times Dr_i)/D_B]$

D_B= The density of the VOC solvent used or recovered at an arbitrary base temperature†.
Dc_i=The density of each raw ink or coating used†.
Dd_i= he density of each VOC solvent diluent used†.
Dg_i=The density of each solvent cleaning agent used†.
Do_i=The density of the VOC solvent in each raw ink or coating used†.
Dr_i=The density of each VOC solvent recovered†.
Lc_i=The directly measured liquid volume of each raw ink or coating used†.
Ld_i=The directly measured liquid volume of each VOC solvent diluent used†.
Lg_i=The directly measured liquid volume of each solvent cleaning agent used†.
Lr_i=The directly measured liquid volume of each VOC solvent recovered†.
Mc_i=The directly measured mass of each raw ink or coating used†.
Md_i=The directly measured mass of each VOC solvent diluent used†.
Mg_i=The directly measured mass of each solvent cleaning agent used†.
Mr_i=The directly measured mass of each VOC solvent recovered†.
k=The total number of raw inks, diluents, cleaning agents or recoveredsolvents which were directly measured by mass.
m=The total number of raw inks, diluents, cleaning agents or recovered solvents which were directly measured by liquid volume and have a known VOC content expressed in mass fraction or weight percent.
n=The total number of raw inks, diluents, cleaning agents or recovered solvents which were directly measured by liquid volume and have a known VOC content expressed in volume fraction or volume percent.

* corrected to density at the arbitrary reference base temperature.
† for just the one performance averaging period.

The calculated emission percentage (P) may be rounded off to the nearest whole number. Frequent press startups and shutdowns are considered normal operations and constitute representative conditions for the performance of this test.
(40 CFR 60.431 and 60.433, and 9 VAC 5-80-110)

IV.D.2. Determination of Overall Effective Organic HAP Recovery Efficiency: The overall effective organic HAP recovery efficiency (Re) shall be calculated in accordance with the following equation:

$$Re = \frac{Mvu - Mhu + [(Mvr) \times (Mhu / Mvu)]}{Mvu}$$

Where, Mvu = The mass of volatile matter, including water, used† (lbs).
Mhu = The mass of organic HAP used† (lbs).
Mvr = The measured mass of volatile matter recovered† (lbs).

† for just the one month.

For the purposes of this calculation, the mass fraction of organic HAP present in the recovered volatile matter is assumed to be equal to the mass fraction of the organic HAP used.

(40 CFR 63.822 and 63.824(b)(1)(i)(F), and 9 VAC 5-80-110)

IV.D.3. Determination of Volatile Matter Mass: Unless specified otherwise, the mass of volatile matter used (Mvu) or recovered (Mvr) for each material may be calculated using the measured amount of the material and using the volatile matter content mass fraction for that material that was determined in accordance with Condition IV.D.6:

Mass Used = Σ Mass of volatile matter in mass-measured materials or Recovered + Σ Mass of volatile matter in volume-measured materials with a known volatile matter content expressed in terms of a weight fraction (weight percent/100)

$$= \sum_{i=1}^{k} (Mv_i \times Wv_i) + \sum_{i=1}^{m} (Lv_i \times Dv_i \times Wv_i)$$

Where,

Dv_i =Density of the i^{th} material in terms of lbs/gal.
Lv_i = The directly measured volume of the material used in terms of gal.†
Mv_i =The directly measured mass of material used in terms of lbs.†
Wv_i =The volatile matter content of the i^{th} material in terms of a mass (or weight) fraction (weight percent/100)(lbs volatile matter/lb material)
k=The total number of materials which were directly measured by mass.
m=The total number of materials which were directly measured by liquid volume and have a known volatile matter content expressed in terms of mass fraction or weight percent.

† for just the one month.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

IV.D.4. Determination of Organic HAP Mass: Unless specified otherwise, the mass of organic HAP used (Mhu) may be calculated using the measured amount of the material and using the organic HAP content mass fraction of the material determined in accordance with Condition IV.D.5.

Mass Used = Σ Mass of organic HAP in mass-measured materials used

+ Σ Mass of organic HAP in volume-measured materials used that have a known organic HAP content expressed in terms of a weight fraction (weight percent/100) as determined in accordance with Condition IV.D.5.

$$= \sum_{i=1}^{k} (Mv_i \times Wv_i) + \sum_{i=1}^{m} (Lv_i \times Dv_i \times Wv_i)$$

Where,

Dv_i = Density of the i^{th} material in terms of lbs/gal.
Lv_i = The measured volume of the i^{th} material used in terms of gal.
Mv_i = The measured mass of the i^{th} material used in terms of gal.
Wv_i = The organic HAP content of the i^{th} material in terms of a mass (or weight) fraction (weight percent/100)(lbs organic HAP/lb material)

k = The total number of materials which were directly measured by mass.
M = The total number of materials which were directly measured by liquid volume and have a known organic HAP content expressed in terms of mass fraction or weight percent.

(40 CFR 63.825, 9 VAC 5-50-30 and 9 VAC 5-80-110)

IV.D.5. Determination of Organic HAP Content: The permittee shall determine the organic HAP content, as the weight fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used in the publication rotogravure facility by one of the following three methods:

a. The permittee may test the material in accordance with Method 311 (ref. 40 CFR 63, Appendix A). This determination may be performed by manufacturer of the material and the results provided to the permittee instead. If these values cannot be determined using Method 311, the permittee shall submit an alternative technique for determining these values for approval by EPA and the recovery efficiency must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

b. The permittee may determine the volatile matter content of the material in accordance with Condition IV.D.6 and use this value for the organic HAP content of the material for all compliance purposes.

c. The permittee may rely on formulation data which is provided by the manufacturer of the material on a Certified Product Data Sheet if the manufacturer has included the organic HAP content determination of all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material and if the manufacturer has determined that HAP content of each raw material present in the formulation by Method 311 (ref. 40 CFR 63, Appendix A). In the event of any inconsistency between the Method 311 test data and the formulation data (that is, if the Method 311 test data is higher), then the Method 311 test data shall govern, unless after consultation, the permittee demonstrates to the satisfaction of the Director, Piedmont Region that the formulation data are correct.

(40 CFR 63.824(b) and 9 VAC 5-80-110)

IV.D.6. Determination of Volatile Matter Content: The permittee shall determine the volatile matter content as the weight fraction of each ink, coating, varnish, adhesive, primer, solvent, reducer, thinner, diluent, and other material used in the publication rotogravure facility by one of the following two methods:

a. The permittee shall determine the volatile matter weight fraction in accordance with Method 24A (ref. 40 CFR 60, Appendix A). This determination may be performed by the manufacturer of the material and the results provided to the permittee instead. If these values cannot be determined using Method 24A, the permittee shall submit an alternative technique for determining these values for approval by EPA.

b. The permittee may determine the volatile matter content based on formulation data and may rely on volatile matter content data which is provided by the material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A, the applicable test method shall govern, unless after consultations, the permittee can demonstrate to the satisfaction of the Director, Piedmont Region that the formulation data are correct.

(40 CFR63.827(c)(1) and (3), and 9 VAC 5-80-110)

IV.D.7. Determination of Volatile Organic Compound (VOC) Content and Density: The permittee shall determine the VOC content and density of each raw ink and related coating used at the publication rotogravure printing facility.

a. For solvent-borne ink systems, the VOC content shall be determined by:

(i) Analysis using Reference Method 24A (ref. 40 CFR 60, Appendix A) of routine weekly samples of raw ink and related coatings in each respective storage tank; or

(ii) Analysis using Reference Method 24A (ref. 40 CFR 60, Appendix A) of samples of each shipment of all purchased raw ink and related coatings, or

(iii) Determination of the VOC content from formulation data supplied by the ink manufacturer with each shipment of raw inks and related coatings used.

b. The permittee shall use the results of verification analyses by Reference Method 24A (ref. 40 CFR 60, Appendix A) to determine compliance when discrepancies with ink manufacturers' formulation data occur.

c. The permittee shall determine the density of raw inks, related coatings, and VOC solvents by:

(i) Making a total of three determinations for each liquid sample at specified temperatures using the procedures of ASTM D1475-60 (Reapproved 1980) Standard Test Method for Paint, Varnish, Lacquer and Related Products. The temperature and density is recorded as the arithmetic average of the three determinations; or

(ii) Using literature values, at specified temperatures, acceptable to the Director, Piedmont Region.

(40 CFR 60.435(a), (b) and (d), and 9 VAC 5-80-110)

IV.D.8. Test Methods: If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

IV.D.9. Conduct of Performance Tests: Performance tests that are conducted in accordance with methods specified in Condition IV.D.8 in addition to the monitoring specified in Section IV.B of this permit shall be conducted in accordance with Section VII.D of this permit.

(9 VAC 5-50-30 G and 9 VAC 5-80-110)

IV.E. Reporting

IV.E.1. Excess Emission and Summary Reports: The permittee shall submit a semiannual summary report to the Director, Piedmont Region for the hazardous air pollutants monitored at the affected source. The report shall be entitled "Summary Report - Gaseous Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

a. The company name and address.

b. An identification of each hazardous air pollutant monitored at the affected source.

c. The beginning and ending dates of the reporting period.

d. A brief description of the process units.

e. The standard contained in Condition IV.A.6.

f. The total operating time of the affected source during the reporting period.

g. An emission data summary, including:

(i) Exceedances of the standard contained in Condition IV.A.6,

(ii) The total duration of excess emissions during the reporting period (in hours),

(iii) The total duration of excess emissions expressed as a percent of the total affected source operating time during that reporting period, and

(iv) A breakdown of the total duration of excess emissions that are due to control equipment problems, process problems, other known causes, and unknown causes.

h. A description of any changes in processes or controls since the last reporting period.

i. The name, title, and signature of the responsible official who is certifying the report and the required certification statement (see Condition 2).

The summary report shall be postmarked by the 30th day following the end of each calendar half. When no excess emissions have occurred, such information shall be stated in the report.

(40 CFR 63.10(e) and 63.830(a), and 9 VAC 5-80-110)

IV.E.2. Periodic Startup, Shutdown and Malfunction Reports: The permittee shall submit semiannual reports by letter to the Director, Piedmont Region if actions taken during a startup, shutdown or malfunction (including actions to correct a malfunction)

during the reporting period are consistent with the procedures in the startup, shutdown and malfunction plan, as required in Condition IV.A.20.a(ii). The periodic report shall contain the following information:

a. A statement that the actions taken during the startup(s), shutdown(s), or malfunction(s) (and actions taken to correct malfunctions) during the reporting period were consistent with the procedures in the plan, and

b. The name, title and signature of the responsible official who is certifying its accuracy and the required certification statement (see Condition 2).

Reports are only required if a startup, shutdown or malfunction occurred during the reporting period. The report, when submitted, shall be postmarked by the 30th day following the calendar half. This semiannual report may be submitted simultaneously with the semiannual excess emission and summary report or other reports.

(40 CFR 63.10(d)(5) and 63.830(b)(5), and 9 VAC 5-80-110)

IV.E.3. Immediate Startup, Shutdown and Malfunction Reports: Any time an action taken by the permittee taken during a startup, shutdown or malfunction (including actions to correct a malfunction) during the reporting period is not consistent with the procedures specified in the startup, shutdown and malfunction plan, the permittee shall report the actions as follows;

a. Within two working days after commencing actions inconsistent with the procedures of the plan, the permittee shall report the actions to the Director, Piedmont Region. This immediate report shall consist of a telephone call or facsimile transmission.

b. Within seven working days after the end of the event, the permittee shall follow up the immediate report with a letter to the Director, Piedmont Region explaining the event, the reasons for not following the procedures of the plan, and whether any excess emissions and/or parameter monitored are believed to have occurred. The follow up letter shall also contain the name, title, and signature of the responsible official who is certifying its accuracy, and the required certification statement (see Condition 2).

(40 CFR 63.10(d)(5) and 63.830(b)(5), and 9 VAC 5-80-110)

IV.E.4. Required Notifications: The permittee shall provide written notifications to the Director, Piedmont Region of the following:

a. Within 15 calendar days after any physical or operational change to any existing press which may increase the emission rate of any air pollutant to which a standard applies under 40 CFR 60, Subpart QQ (VOC) unless that change is specifically exempted from the definition of “modification” under 40 CFR 60.14.

b. Within 15 calendar days after any change to the information already provided to the Director, Piedmont Region in notifications required under 40 CFR 63.9 (notification of applicability, notification of construction/reconstruction, notification of physical or operational change, notifications of planned or actual dates of construction or startup, notifications of special compliance requirements, notification of planned dates of performance tests, notifications of visible

emission evaluations, required notifications for continuous monitoring systems, and notifications of compliance status).

(40 CFR 60.7(a), 60.8(d), and 63.9(j) and 9 VAC 5-80-110)

V. Cylinder Electroplating Process Requirements - (P015 and P016)

V.A. Limitations

V.A.1. MACT Subpart N Requirements by Reference: Except where this permit is more restrictive than the applicable requirement, the MACT Subpart N equipment as described in Section II shall be operated in compliance with the requirements of 40 CFR 63, Subpart N..

(9 VAC 5-60-120 and Condition 30 of TBD Permit)

V.A.2. Visible Emission Limit: Visible emissions from the large, hard chromium electroplating process (P015 and P016) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

V.A.3. Emission Standards: During the operation of the large, hard chromium electroplating process (P015 and P016), the permittee shall control chromium emissions discharged to the atmosphere by maintaining the concentration of total chromium in the exhaust gas stream below 6.6 x 10-6 gr/dscf. The chromium emission limit does not apply during periods of malfunction. The work practice standards in Condition V.A.5 address operation and maintenance during malfunctions.

(40 CFR 63.342(b) and (c), 9 VAC 5-40-260, and 9 VAC 5-80-110)

V.A.4. Operating Limit: To be in compliance with the standards of Condition V.A.3, the composite mesh pad demister filter control system shall be operated within ± 2 inches of water column of the overall pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(40 CFR 63.343(c) and 9 VAC 5-80-110)

V.A.5. Work Practice Standards: The permittee shall comply with the following operation and maintenance practices:

a. At all times, including periods of startup, shutdown, and malfunction the permittee shall operate and maintain the large hard chromium electroplating process, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices and consistent with the operation and maintenance plan required by Condition V.A.6:

   (i) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the owner or operator shall:

      (a) Record the actions taken for that event, and

      (b) Report such actions by phone to the Director, Piedmont Region within 2 working days after commencing actions inconsistent with the plan, and

(c) Follow up with a letter to the Director, Piedmont Region within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Director.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by Condition V.A.6.

(iii) The operation and maintenance requirements established by this condition and by the operation and maintenance plan required by Condition V.A.6 are enforceable independent of emissions limitations or other requirements of this permit.

b. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Director, Piedmont Region, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.

Based on the results of this determination, the Director, Piedmont Region may require that the permittee make changes to the operation and maintenance plan. Revisions may be required if the Director finds that the plan:

(i) Does not address a malfunction that has occurred;

(ii) Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or

(iii) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

(40 CFR 63.342(f) and 9 VAC 5-80-110)

V.A.6. Operation and Maintenance Plan: The permittee shall develop and implement a written operation and maintenance plan for the large hard chromium electroplating process (P015), including associated air pollution control devices and monitoring equipment. This plan shall be incorporated into this permit by reference.

a. The plan is required to include the following elements:

(i) The plan shall specify the operation and maintenance criteria for the large hard chromium electroplating process , the associated air pollution control device and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;

(ii) The plan shall incorporate the following work practice standards for the composite mesh pad demister filter:

(a) Quarterly - Visually inspect the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.

(b) Quarterly - Visually inspect the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.

(c) Quarterly - Visually inspect the ductwork from the tank to the control device to ensure there are no leaks.

(d) Perform washdown of the composite mesh pads in accordance with manufacturer recommendations;

(iii) The plan shall incorporate the work practice standards recommended by the manufacturer for the continuous monitoring device that monitors differential pressure across the demister filter;

(iv) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

(v) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

b. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(40 CFR 63.342(f) and 9 VAC 5-80-110)

V.A.7. Violation of Hazardous Air Pollutant Emission Standards: The large hard chromium electroplating process shall be shut down immediately if it is unable to meet the applicable emission standards, and it shall not return to operation until it is in compliance with the applicable emission standards.

(9 VAC 5-20-180 F.2 and 9 VAC 5-80-110)

V.B. Monitoring

V.B.1. Continuous Monitoring Device (CMD): The composite mesh pad type demister filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.

(40 CFR 63.343(c) and 9 VAC 5-80-110)

V.B.2. Continuous Monitoring Device Installation Requirements: All monitoring equipment shall be installed such that representative measurements of emissions or

process parameters from the affected source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for the installation, operation and calibration of the system. The specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with the manufacturer's accuracy specifications.

(40 CFR 63.344(d)(2) and 9 VAC 5-80-110)

V.B.3. Periodic Monitoring For Chromium and Particulate Emissions: The permittee shall monitor and record the pressure drop across the composite mesh pad type demister filter once each day that the large hard chromium electroplating process is operating.

(40 CFR 63.343(c) and 9 VAC 5-80-110)

V.C. Recordkeeping

V.C.1. Compliance Records for the Chromium Electroplating MACT: The permittee shall maintain files of all information required by this condition recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. Inspection records for the add-on air pollution control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

b. Records of all maintenance performed on the large hard chromium electroplating process, the demister filter, and the differential pressure monitoring equipment.

c. Records of the occurrence, duration, and cause (if known) of each malfunction of the large hard chromium electroplating process, the demister filter, and the differential pressure monitoring equipment.

d. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.

e. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan.

f. Test reports documenting results of all performance tests.

g. All measurements as may be necessary to determine the conditions of performance tests.

h. Records of monitoring data required by Condition V.B.2 including the date and time the data are collected, with the required compliance value determined during performance testing.

i. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment.

j. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment.

k. The total large hard chromium electroplating process operating time during the reporting period.

l. Copies of the notifications and reports, and all supporting documentation, including, but not limited to, the following:

(i) Initial applicability notifications.

(ii) Notification of performance tests.

(iii) Initial notification of compliance status.

(iv) Ongoing compliance status reports.

(v) Reports of performance test results.

(vi) Notifications of construction or reconstruction, if applicable.

(40 CFR 63.346, 63.347, and 63.10(b)(1), 9 VAC 5-50-50, and 9 VAC 5-80-110)

V.C.2. Additional Compliance Records for the Chromium Electroplating MACT N: The permittee shall also maintain the following records necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region:

a. The written operation and maintenance plan, for the life of the large hard chromium electroplating process or until the process is no longer subject to the provisions of 40 CFR 63, Subpart N., and

b. Previous (i.e., superseded) versions of the operation and maintenance plan, if the operation and maintenance plan is revised, for a period of 5 years after each revision to the plan.

(40 CFR 63.342(f)(3), 9 VAC 5-50-50, and 9 VAC 5-80-110)

V.C.3. Additional Compliance Records: In addition to the records required in Condition V.C.2 above, the permittee shall also maintain records of all emission data and operating parameters necessary to demonstrate compliance with the requirements of this permit and shall be consistent with DEQ policy. The content of

and format of such records shall be arranged with the Director, Piedmont Region. These records shall also include, but are not limited to:

a. Monthly records of ampere-hours used by the hard chromium-electroplating tanks.

b. Monthly calculations of the controlled particulate emissions from the hard chromium-electroplating tanks, including any emission factors used in the calculation.

c. Annual particulate emissions from the hard chromium-electroplating tanks, calculated monthly as the sum of emissions over the previous consecutive 12 months.

d. Records of the occurrence and duration of each startup and shutdown of the large hard chromium electroplating process and any periods during which the differential pressure monitoring equipment is inoperative. (Malfunction records are included with other records required Condition V.C.1) These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50 F, 9 VAC 5-60-50 C, and 9 VAC 5-80-110)

V.D. Testing

V.D.1. Performance Test Methods: If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

V.D.2. The Site-Specific Test Plan: Before conducting a performance test on the hard chromium electroplating facility, the permittee shall develop and, upon request, submit a site-specific test plan to the Director, Piedmont Region for approval. If requested, the permittee shall submit the site-specific test plan to the Director, Piedmont Region at least 60 calendar days before the performance test is scheduled to take place, and simultaneously with the notification of intention to conduct a performance test, or on another mutually agreed upon date.

(40 CFR 63.7(b) and 63.344(a), and 9 VAC 5-80-110)

V.D.3. Conduct of Performance Tests: Performance tests shall be conducted under such conditions as the Director, Piedmont Region specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(40 CFR 63.7(e), 9 VAC 5-60-30 C, and 9 VAC 5-80-110)

V.D.4. Conduct of Performance Test Runs: Each performance test shall consist of three separate runs using the applicable test methods. The sampling time and sample volume for each run of Methods 306 and 306A (ref. 40 CFR 63, Appendix A)

shall be at least 120 minutes and 60 dscf, respectively. For the purposes of determining compliance with the relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Director, Piedmont Region, results of a test run may be replaced with results of an additional test run in the event that:

a. A sample is accidentally lost after the testing team leaves the site; or

b. Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

c. Extreme meteorological conditions occur; or

d. Other circumstances occur that are beyond the owner or operator's control.

(40 CFR 63.7(e) and 63.344(c), and 9 VAC 5-80-110)

V.D.5. Performance Test Requirements: If additional performance testing is conducted, the permittee shall:

a. Determine the outlet total chromium concentration;

b. Determine the particulate emission rate;

c. Establish as a site-specific operating parameter, the overall pressure drop across the system, setting the new value that corresponds to compliance with the applicable emission limitation. The permittee may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± ~~1~~2 inches of water column from this value as the compliant range;

d. Install pressure taps at one of the following locations:

   (i) At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower, or

   (ii) On the front side of the first mesh pad and back side of the last mesh pad within the control system;

e. Site the pressure taps at locations that are:

   (i) Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters, and

   (ii) Situated such that no air infiltration at measurement site will occur that could bias the measurement;

f. Install pressure taps that are constructed of either polyethylene, polybutylene, or other nonreactive materials;

g. Connect the pressure taps to the device that is used to measure pressure drop using nonreactive plastic tubing;

h. Use one of the following types of pressure gauges monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer; and

i. Zero each gauge prior to connecting any pressure lines to the pressure gauge(s). No calibration of the pressure gauges is required.

j. Make a report of the performance test results in accordance with Condition V.E.2.

(40 CFR 63.343(c) and (d), and 9 VAC 5-80-110)

V.D.6. Performance Testing Facilities: If required to do performance testing, the permittee shall provide, in addition to those required in Condition V.D.1, any other performance testing facilities that the Director, Piedmont Region deems necessary for safe and adequate testing of a source.

(40 CFR 63.7(d) and 9 VAC 5-80-110)

V.E. Reporting

V.E.1. Approved Reporting Methods: Reports and notifications required by Section V of this permit may be sent by U.S. mail, fax, or by another courier as follows:

a. Submittals sent by U.S. mail shall be postmarked on or before the specified date.

b. Submittals sent by other methods shall be received by the Director, Piedmont Region on or before the specified date.

c. If acceptable to both the Director, Piedmont Region and the permittee, reports may be submitted on electronic media.

(40 CFR 63.347(f) and 9 VAC 5-80-110)

V.E.2. Performance Test Report: The permittee shall report the results of the performance test to the Director, Piedmont Region before the close of business on the 60th day following the completion of the performance test and shall be submitted as part of the notification of compliance status. Performance test results shall be documented in complete test reports that contain the following information:

a. A brief process description;

b. Sampling location description(s);

c. A description of sampling and analytical procedures and any modifications to standard procedures;

d. Test results;

e. Quality assurance procedures and results;

f. Records of operating conditions during the test, preparation of standards, and calibration procedures;

g. Raw data sheets for field sampling and field and laboratory analyses;

h. Documentation of calculations; and

i. Any other information required by the test method.

(40 CFR 63.344(a) and 63.347(f) and 9 VAC 5-80-110)

V.E.3. Ongoing Compliance Status Reports: The permittee shall submit a summary report to the Director, Piedmont Region to document the ongoing compliance status of the large hard chromium electroplating process (P015 and P016). The report shall be submitted semiannually except when the Director, Piedmont Region determines that more frequent reporting is necessary to accurately assess the compliance status or the monitoring data collected by the permittee in accordance with Condition V.B.3 shows (by exceeding the range of compliant differential pressure values) that the emission limit has been exceeded. Once an owner or operator of an affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency is approved. The report shall contain the following information:

a. The company name and address of the large hard chromium electroplating process (P015 and P016);

b. An identification of the operating parameter that is monitored for compliance determination (differential pressure across the demister filter control device or composite mesh pad);

c. The relevant emission limitation for the large hard chromium electroplating process, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation, as reported in the initial compliance notification or subsequent performance test report;

d. The beginning and ending dates of the reporting period;

e. A description of the type of process performed in the large hard chromium electroplating tank;

f. The total operating time of the affected source during the reporting period;

g. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;

h. A certification by a responsible official (as defined in 9 VAC 5-80-80 G) that the work practice standards in Condition V.A.5 were followed in accordance with the operation and maintenance plan required by Condition V.A.6;

i. If the operation and maintenance plan required by Condition V.A.6 was not followed, an explanation of the reasons for not following the provisions, an assessment of whether and excess emissions and /or parameter monitoring exceedances are believed to have occurred and a copy of the report(s) required by Condition V.A.5.a(i) documenting that the operation and maintenance plan was not followed;

j. A description of any changes in monitoring, processes or controls since the last reporting period;

k. The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

l. The date of the report.

(40 CFR 63.347(g)(1) and (3), and 9 VAC 5-80-110)

V.E.4. Requests to Reduce the Frequency of Ongoing Compliance Status Reports: A permittee who is required to submit ongoing compliance status reports on a quarterly (or more frequent) basis, may reduce the frequency of reporting to semiannual if all of the following conditions are met:

a. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the large hard chromium electroplating process (P015) is in compliance with the relevant emission limit;

b. The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of Section V of this permit; and

c. The Director, Piedmont Region does not object to a reduced reporting frequency for the affected source. The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Director, Piedmont Region in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. Review of the request and notice of disapproval will be made in accordance with 9 VAC 5-60-100 40 CFR 63.346(g)(2)(ii). In the absence of a notice of disapproval from the Director within 45 days, approval is automatically granted.

As soon as the monitoring data required Condition V.B.3 shows that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Director, Piedmont Region to reduce the reporting frequency.

(40 CFR 63.347(g)(2) and 9 VAC 5-80-110)

V.E.5. Required Notifications: The permittee shall provide written notifications to the Director, Piedmont Region of the following:

a. At least 60 calendar days before the performance test is scheduled to begin, of the permittee's intention to conduct a performance test, to allow the DEQ to review and approve the site specific test plan and to have an observer present during the test. Observation of the performance test by the DEQ is optional at the DEQ's discretion. In the event that the permittee is unable to conduct the performance test on the date specified due to unforeseeable circumstances beyond his or her control, the permittee shall notify the Director, Piedmont Region within 5 days prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal

responsibility for compliance with any other applicable provisions of this permit or with any other applicable Federal, State, or local requirement.

b. Within 15 calendar days after any change to the information already provided to the Director, Piedmont Region in notifications required under 40 CFR 63.9 (notification of applicability, notification of construction/reconstruction, notification of physical or operational change, notifications of planned or actual dates of construction or startup, notifications of special compliance requirements, notification of planned dates of performance tests, notifications of visible emission evaluations, required notifications for continuous monitoring systems, and notifications of compliance status).

(40 CFR 63.7(b), 63.9(j), 63.347(d) and (g)(2), and 9 VAC 5-80-110)

VI. Waste Paper Handling Process Requirements (P017, P018, P019)

VI.A. Limitations

VI.A.1. Emission Controls - Particulate and PM10 emissions from the operation of the waste paper handling system shall be controlled by proper operation and maintenance of the waste paper handling system including the cyclone and baghouse units (P017, P018, and P019). The cyclones shall be provided with adequate access for inspection. An annual inspection shall be conducted on the cyclone for the purpose of identifying leaks, cracks, or other structural problems. The baghouses shall meet a control efficiency of 90%.

(9 VAC 5-80-110 and Condition 6 of TBD Permit)

VI.A.2. Visible Emissions Limits - Visible emissions from the waste paper handling system shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110 and Condition 26 of TBD Permit)

VI.A.3. Emission Limits - Emissions vented outside of the building from the waste paper handling system shall not exceed the limits specified below. Annual emissions shall be calculated as the sum of each consecutive 12 month period:

Total Suspended Particulates	0.01 grains/dscf	0.3 lb/hr	1.4 tons/yr
PM_{10}	0.01 grains/dscf	0.3 lb/hr	1.4 tons/yr

(9 VAC 5-80-110 and Condition 22 of TBD Permit)

VI.A.4. Written Operating Procedures: The permittee shall have available written operating procedures for all air pollution control equipment associated with the waste paper handling systems (C005, C006, C007). Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of the required training including names of trainees, a statement of time, place and nature or training provided.

(9 VAC 5-80-110)

VI.B. Monitoring

VI.B.1. Continuous Monitoring Device (CMD): The fabric filter baghouses (C005, C006, C007) shall be equipped with a device to continuously monitor the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.

(9 VAC 5-80-110 and Condition 35 of TBD Permit)

VI.B.2. Periodic Monitoring for Visible Emissions for Waste Paper Handling Exhaust (P017, P018, P019): If at anytime the waste paper handling system is vented outside the facility building, an inspection for visible emissions shall be conducted daily in accordance with Condition IV.D.1 until which time the exhaust from the waste paper handling system is vented indoors again.

(9 VAC 5-80-110 E.3.)

VI.B.3. Periodic Monitoring of Waste Paper Handling System (C005, C006, C007): The permittee shall monitor and record the pressure drop across the fabric filters at least once per week that the waste paper handling system is operating.

(9 VAC 5-80-110 E.3.)

VI.C. Recordkeeping

VI.C.1. Compliance Records: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. The number of hours of operation that the waste paper handling system is vented to outside of the building;

b. Annual particulate emissions from the waste paper handling system venting outside the building, calculated monthly as the sum of emissions for the previous consecutive 12 months;

c. Annual inspection records of the cyclones at the waste paper handling system; and

d. Differential pressure drop across fabric filters (C005, C006, C007); and

e. Any and all visible emission observations and evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 39 of TBD Permit)

VI.D. Testing

VI.D.1. Visible Emissions Evaluation: Inspection for the presence of visible emissions from the waste paper handling system shall be conducted each time the system malfunctions and is vented outside of the building. If during the inspection, visible emissions are observed, timely corrective action shall be initiated within four hours of the inspection such that the waste paper handling system resumes operation and there are no visible emissions within 24 hours of the initial observation. If timely corrective action cannon be taken within the timeframe specified above, an EPA Method 9 (40 CFR Part 60, appendix A) visible emissions evaluation (VEE) shall be conducted on each source of visible emissions. Each VEE shall be conducted for a minimum period of six minutes.

(9 VAC 5-80-110 and Condition 37 of TBD Permit)

VI.D.2. Performance Test Methods: If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9 VAC 5-80-110)

VI.D.3. Conduct of Performance Tests: Performance tests that are conducted in accordance with methods specified in Condition VI.D in addition to the monitoring specified in Section VI.B of this permit shall be conducted in accordance with Section VI.B of this permit.

(9 VAC 5-50-30 C and 9 VAC 5-80-110)

VI.E. Reporting

VI.E.1. Required Notifications: The permittee shall provide written notifications to the Director, Piedmont Region at least 30 days prior to any performance test used to demonstrate compliance with a standard under Section VI.A of this permit. The permittee shall submit a test protocol with the notification, at least 30 days prior to testing.

(9 VAC 5-50-30 B and A.4 and 9 VAC 5-80-110)

VII. Facility Wide Conditions

VII.A. Limitations

VII.A.1. Applicable New or Revised MACT Standards: An owner or operator of an affected source who is subject to an emission standard promulgated under 40 CFR 63 shall comply with the requirements of that standard by the date established in the applicable 40 CFR 63 subpart regardless of whether this permit has been revised or modified to incorporate the emission standard.

(40 CFR 63.4(a)(5) and 9 VAC 5-80-110)

VII.A.2. Visible Emission Standard: Unless specified otherwise in this permit, visible emissions from any affected facility shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

VII.A.3. VOC Emission Standards: At all times, the disposal of VOC shall be accomplished, to the extent practicable, consistent with air pollution control practices for minimizing emissions. VOC shall not be intentionally spilled, discarded into sewers which are not connected to a treatment plant or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-50-20 F. and 9 VAC 5-80-110)

VII.A.4. Facility Wide Emission Limits: Emissions from the operation of the facility shall not exceed the limits specified below:

Total Suspended Particulate	2.1	lbs/hr	3.6	tons/yr	(9 VAC 5-50-260)
PM_{10}	1.2	lbs/hr	3.3	tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	64.7	lbs/hr	24.3	tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO_2)	18.2	lbs/hr	27.3	tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	8.1	lbs/hr	18.9	tons/yr	(9 VAC 5-50-260)
Volatile Organic Compounds	531.5	lbs/hr	1462.9	tons/yr	(9 VAC 5-50-260)
Toluene	388.2	lbs/hr	1259.9	tons/yr	(9 VAC 5-50-260)
Xylene	24.7	lbs/hr	67.9	tons/yr	(9 VAC 5-50-260)
Hexane	4.8	lbs/hr	13.2	tons/yr	(9 VAC 5-50-260)
Ethylbenzene	9.6	lbs/hr	26.2	tons/yr	(9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 23 of TBD Permit)

VII.A.5. Minimizing Emissions: At all times, including startup, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated control equipment in a manner consistent with air pollution control practices for minimizing emissions.

(9 VAC 5-50-20 E and 9 VAC 5-80-110)

VII.A.6. Maintenance/Operating Procedures - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

(9 VAC 5-80-110 and Condition 46 of the permit dated TBD)

VII.A.7. Circumvention: No owner or other person shall:

a. Cause or permit the installation of any device or any means which, without resulting in reduction of the total amount of air pollutants emitted, conceals or dilutes an air emission of air pollutants which would otherwise violate the state or federal regulations or this permit Such concealment includes, but is not limited to, any of the following:

(i) The use of gaseous diluents to achieve compliance with a standard which is based upon the concentration of a pollutant in the gases discharged to the atmosphere.

(ii) The use of gaseous diluents to achieve compliance with a visible emission standard.

(iii) The piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

b. Cause or allow a pattern of ownership or development over a geographic area of a source which, except for a pattern of ownership or development would otherwise require a permit.

(9 VAC 5-20-70 A, 40 CFR 60.12, 40 CFR 63.5(b), 9 VAC 5-80-10 P, 9 VAC 5-80-1790, 9 VAC 5-80-2100 and 9 VAC 5-80-110)

VII.A.8. Violation of Ambient Air Quality Standard: The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I)

VII.B. Monitoring

VII.B.1. Continuous Monitoring Systems and Measuring Devices - All continuous monitoring systems and measuring devices shall be installed and operational prior to conducting initial performance tests. Performance evaluations of the continuous monitoring system must take place during the performance tests under 9 VAC 5-50-30 of the Regulations or within 30 days thereafter. Two copies of the performance evaluation report shall be submitted to the Director, Piedmont Regional Office within 45 days of said evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device.

(9 VAC 5-50-40 B and C, 9 VAC 5-80-110, and Condition 36 of TBD permit)

VII.B.2. Continuous Monitoring System Requirements: All continuous monitoring systems required by this permit shall be installed, calibrated, maintained, and operated in accordance with the manufacturer's written requirements or recommendations for installation, operation and calibration of the system or device.

(9 VAC 5-50-40 D and 9 VAC 5-80-110)

VII.C. Recordkeeping

VII.C.1. Required Compliance Records: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. All documentation used to support emission calculations;

b. All visible emission observations and evaluations;

c. Records of occurrence and duration of each start up, shutdown, and malfunction operations;

d. Maintenance schedules and records of completed maintenance; and

e. Operator training records.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 39 of TBD Permit)

VII.C.2. Keeping Records: Unless otherwise specified in this permit, records required by the terms of this permit shall be kept:

a. On-site, readily accessible and available for inspection by the DEQ;

b. As either paper or electronic records in a permanent form suitable for inspection; and

c. For the at least two years following the date of such measurements, maintenance, reports and records.

(9 VAC 5-50-50 D, 9 VAC 5-80-110 and Condition 39 of TBD Permit)

VII.D. Testing

VII.D.1. Testing/Monitoring Ports: The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 F, 9 VAC 5-80-110, and Condition 31 of TBD Permit)

VII.D.2. Performance Testing Notification - The permittee shall furnish written notification to the Director, Piedmont Regional Office of the anticipated dates of performance tests of the printing facility and testing protocols postmarked at least 30 days prior to such dates.
(9 VAC 5-50-50)

VII.D.3. Performance Test Methods: If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

VII.D.4. Conduct of Performance Test Runs: Unless otherwise specified in this permit, each performance test shall consist of three separate runs using the applicable test methods. Each run shall be conducted for the time and under the conditions specified in the applicable standard or method. For the purposes of determining compliance with the relevant standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the permittee's control, compliance may, upon approval from the Director, Piedmont Region, be determined using the arithmetic mean of the two other runs.
(9 VAC 5-50-30 E and 9 VAC 5-80-110)

VII.D.5. Performance Test Guidelines: Performance tests shall be subject to testing guidelines approved by the Director, Piedmont Region. Procedures may be adjusted or changed by the DEQ to suit specific sampling conditions based upon good practice, judgement and experience. When such tests are adjusted, consideration shall be given to the effect of such a change on the established emission standards. Tests shall be performed under the direction of persons whose qualifications are acceptable to the Director, Piedmont Region.
(9 VAC 5-50-30 B and 9 VAC 5-80-110)

VII.D.6. Conduct of Performance Tests: Unless otherwise specified in this permit, performance tests shall be conducted under such conditions as the Director, Piedmont Region shall specify to the permittee based on representative performance of the affected source. The permittee shall make available to the Director such records as may be necessary to determine the conditions of performance tests. Unless otherwise specified in this permit, operation during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test.
(9 VAC 5-50-30 C and 9 VAC 5-80-110)

VII.D.7. Performance Testing Facilities: The DEQ may test emissions of air pollutants from any source of air pollutants. Upon request of the Director, Piedmont Region, the permittee shall provide performance testing facilities as follows:

a. Sampling ports adequate for test methods applicable to such source.

b. Safe sampling platforms;

c. Safe access to sampling platforms;

d. Utilities for sampling and testing equipment; and

(9 VAC 5-50-30 F and 9 VAC 5-80-110)

VII.E. Reporting

VII.E.1. Required Notifications: Unless otherwise specified in this permit, the permittee shall provide written notifications to the Director, Piedmont Region of the following:

a. The date of commencement of construction, reconstruction or modification of a new or modified source postmarked no later than 30 days after such date.

b. The anticipated date of initial startup of a new or modified source postmarked no later than 30 days prior to such date.

c. The actual date of initial startup of a new or modified source postmarked no later than 15 days after such date.

d. The date of any performance tests the owner wishes DEQ to consider in determining compliance with a standard. Notification shall be postmarked not less than 30 days prior to such date.

e. The date upon which demonstration of a continuous monitoring system performance begins. Notification shall be postmarked not less than 30 days prior to such date.

(9 VAC 5-50-50 A and 9 VAC 5-80-110)

VII.E.2. Notification for Control Equipment Maintenance - The permittee shall furnish notification to the Director, Piedmont Region of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;

b. The expected length of time that the air pollution control equipment will be out of service;

c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;

d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110 and Condition 43 of TBD Permit)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T022	Petroleum Storage Tank (No. 2 Fuel Oil)	5-80-720 B. 2. & 5.	VOC	6000 gallons
CM001	Chemical Dechrome Tank	5-80-720 B. 5.	None	NA
CM002	Mechanical Dechrome Tank	5-80-720 B. 5.	None	NA
CM003	Degreasing Tank (non-VOC process)	5-80-720 B. 5.	None	NA
CM004	Copper Plating Tank	5-80-720 B. 5.	None	NA
CM005	Polishing Tank	5-80-720 B. 5.	None	NA
CM006	Electro-mechanical Engraving Tank (closed loop)	5-80-720 B. 5.	None	NA

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IX. Permit Shield

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
none		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

X. General Conditions

X.A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

X.B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

   If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

2. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

3. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

4. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)

X.C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

a. The date, place as defined in the permit, and time of sampling or measurements.

b. The date(s) analyses were performed.

c. The company or entity that performed the analyses.

d. The analytical techniques or methods used.

e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (i) Exceedance of emissions limitations or operational restrictions;

      (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      (iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

X.D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a

certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

7. One copy of the annual compliance certification shall be sent to EPA at the following address:

   Clean Air Act Title V Compliance Certification (3AP00)
   U. S. Environmental Protection Agency, Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

X.E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

X.F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within fourteen (14) days of discovery provide a written statement giving all pertinent facts, including the estimated duration of

the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.

1. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

2. All emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C must make written reports within 14 days of the malfunction occurrence.

(9 VAC 5-20-180 C and 9 VAC 5-50-50)

X.G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

X.H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

X.I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

X.J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

X.K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

X.L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

X.M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the proceeding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

X.N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

X.O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

X.P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

X.Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

X.R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

X.S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

X.T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

X.U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

3. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

4. The permitted facility was at the time being properly operated.

5. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

6. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

7. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

8. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

X.V. Permit Revocation or Termination for Cause

In addition the permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and VAC 5-80-260)

X.W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An

applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X.X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

X.Y. Asbestos Demolition and Renovation Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to demolition and renovation, (40 CFR 61.146)
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

X.Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

X.AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

X.BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

XI. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

none

(9 VAC 5-80-110 N and 9 VAC 5-80-300)